

### **OIL ANALYSIS REPORT**

Sample Rating Trend



# KAESER SFC 160 9000004 (S/N 1051)

Component Compressor

Fluid KAESER SIGMA (OEM) S-460 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC131435	KC130560	
Sample Date		Client Info		03 Jul 2024	11 Apr 2024	
Machine Age	hrs	Client Info		4768	2807	
Oil Age	hrs	Client Info		4768	2807	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				NORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	2	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	<1	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	9	2	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	0	2	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m	90	0	2	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m	90	<1	2	
Calcium	ppm	ASTM D5185m	2	0	2	
Phosphorus	ppm	ASTM D5185m		47	38	
Zinc	ppm	ASTM D5185m		0	0	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	
Sodium	ppm	ASTM D5185m		<1	2	
Potassium	ppm	ASTM D5185m	>20	0	<1	
Water	%	ASTM D6304	>0.05	0.003	0.003	
ppm Water	ppm	ASTM D6304	>500	26	29	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1166	45898	
Particles >6µm		ASTM D7647	>1300	433	11398	
Particles >14µm		ASTM D7647	>80	32	<b>3</b> 37	
Particles >21µm		ASTM D7647	>20	5	<b>4</b> 94	
Particles >38µm		ASTM D7647	>4	0	<b>5</b>	
Particles >71µm		ASTM D7647	>3	0	1	
Oil Cleanliness		ISO 4406 (c)	>/17/13	17/16/12	▲ 23/21/16	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.31	0.20	



## **OIL ANALYSIS REPORT**

Water (KF)	VISUAL		method	limit/base	current	history1	history2
10000 Severe	White Metal	scalar	*Visual	NONE	NONE	NONE	
€ 8000 -	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
4000	Precipitate	scalar	*Visual	NONE	NONE	NONE	
4 ≥ 4000	Silt	scalar	*Visual	NONE	NONE	NONE	
2000 -	Debris	scalar	*Visual	NONE	NONE	NONE	
Abnormal	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
1/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
April 1/24	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
Particle Trend	Free Water	scalar	*Visual		NEG	NEG	
Ξε 40k   Ξε 40k   Ξε 40k	FLUID PROPER	RTIES	method	limit/base	current	history1	history2
and the second s	Visc @ 40°C	cSt	ASTM D445	46	46.4	47.3	
ped to 20k	SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
nu 10k +2711ude	Color						no image
Water (KF)	Bottom						no image
Mater (2000	GRAPHS						
\$ 4000	Ferrous Alloys			491,520	Particle Count		20
2000 Abnormal	10 iron 1			491,520	1		120
	6			122,880	-		-24
Apri 1/24				30,720			22
Ϋ́Υ	2			30,720	1		-22
Viscosity @ 40°C	0			7,680	4		-20 -
52 Abnormal	Apr11/24			Jul3/24 . [per 1 m])			-20 -18 -16 -14 -14
	Apr			ad) sa			10
	Non-ferrous Met	als		sap itted 480			16
(3 46 - <b>Base</b> (-) ₹ 44	10 copper 1			t i			14
42				lag 120		N	11
40 - Abnormal				30	-		-12
38	2			8	_		-10
April 1/24				-	' <b>Bereve</b> mal		
Ар	11/24			Jul3/24			-8
Particle Trend	Apr				, <u> </u>		6
50k 4/m	Viscosity @ 40°C	2			Acid Number	14µ 21µ	38µ 71µ
Ē 40k +	55 Abnormal			(B)HOX 0.40			
<sup>2</sup>	50 +			.40 및 0.40	Base		*****
band to an	(C) type 45 - Abnormal			ມີ ຍັ ຍັ			
	40 - Abnormal			-q 0.20			
	35			4 0.20 9 0.10 View 0.10			
0k				Jul3/24			Jul3.24 -
April 1/24	Apr11/24			Jul	Apr11/2		Jul
TESTING LABORATORY Unique Numb	b. : KC131435 er : 06239160 ber : 11127994 ge : IND 2 ort, contact Customer Ser	Rece Teste Diagr	ived : 17 ed : 18 nosed : 19 800-237-136	7 Jul 2024 3 Jul 2024 1 Jul 2024 - Don 9.			- SMP PLANT CLAYTON AVE ICKLIFFE, OF US 44092 Contact: T:
Statements of conformity to					rule (JCGM 106	5:2012)	F

Contact/Location: ? ? - PCCWIC Page 2 of 2